SR=Single-analyst Standard Deviation, µg/L

Method 279.2

For Thalliu, Method 279.2 (Atomic Absorption, Furnace Technique) replace the Precision and Accuracy Section statement with the following:

Precision and Accuracy

An interlaboratory study on metal analyses by this method was conducted by the Quality Assurance Branch (QAB) of the Environmental Monitoring Systems Laboratory—Cincinnati (EMSL-CI). Synthetic concentrates containing various levels of this element were added to reagent water, surface water, drinking water and three effluents. These samples were digested by the total digestion procedure, 4.1.3 in this manual. Results for the reagent water are given below. Results for other water types and study details are found in ''EPA Method Study 31, Trace Metals by Atomic Absorption (Furnace Techniques),'' National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161 Order No. PB 86–121 704/AS, by Copeland, F.R. and Maney, J.P., January 1986.

For a concentration range of 10.00–252 µg/L.
X=0.8781(C)−0.715
S=0.1112(X)+0.669
SR=0.1005(X)+0.241

where:

C=True Value for the Concentration, µg/L
X=Mean Recovery, µg/L
S=Multi-laboratory Standard Deviation, µg/L
SR=Single-analyst Standard Deviation, µg/L

Method 286.2

For Vanadium, Method 286.2 (Atomic Absorption, Furnace Technique) replace the Precision and Accuracy Section statement with the following:

Precision and Accuracy

An interlaboratory study on metal analyses by this method was conducted by the Quality Assurance Branch (QAB) of the Environmental Monitoring Systems Laboratory—Cincinnati (EMSL-CI). Synthetic concentrates containing various levels of this element were added to reagent water, surface water, drinking water and three effluents. These samples were digested by the total digestion procedure, 4.1.3 in this manual. Results for the reagent water are given below. Results for other water types and study details are found in ''EPA Method Study 31, Trace Metals by Atomic Absorption (Furnace Techniques),'' National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161 Order No. PB 86–121 704/AS, by Copeland, F.R. and Maney, J.P., January 1986.

For a concentration range of 1.36–982 µg/L.
X=0.8486(C)+0.252
S=0.3323(X)−0.428
SR=0.1195(X)−0.121

where:

C=True Value for the Concentration, µg/L
X=Mean Recovery, µg/L
S=Multi-laboratory Standard Deviation, µg/L
SR=Single-analyst Standard Deviation, µg/L

Method 289.2

For Zinc, Method 289.2 (Atomic Absorption, Furnace Technique) replace the Precision and Accuracy Section statement with the following:

Precision and Accuracy

An interlaboratory study on metal analyses by this method was conducted by the Quality Assurance Branch (QAB) of the Environmental Monitoring Systems Laboratory—Cincinnati (EMSL-CI). Synthetic concentrates containing various levels of this element were added to reagent water, surface water, drinking water and three effluents. These samples were digested by the total digestion procedure, 4.1.3 in this manual. Results for the reagent water are given below. Results for other water types and study details are found in ''EPA Method Study 31, Trace Metals by Atomic Absorption (Furnace Techniques),'' National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161 Order No. PB 86–121 704/AS, by Copeland, F.R. and Maney, J.P., January 1986.

For a concentration range of 0.51–189 µg/L.
X=1.6710(C)+1.485
S=0.6740(X)−0.342
SR=0.3895(X)−0.384

where:

C=True Value for the Concentration, µg/L
X=Mean Recovery, µg/L
S=Multi-laboratory Standard Deviation, µg/L
SR=Single-analyst Standard Deviation, µg/L

[55 FR 33442, Aug. 15, 1990]

PART 140—MARINE SANITATION DEVICE STANDARD

Sec.

AUTHORITY: 33 U.S.C. 1322, as amended.

SOURCE: 41 FR 4453, Jan. 29, 1976, unless otherwise noted.

§ 140.1 Definitions.

For the purpose of these standards the following definitions shall apply:

(a) *Sewage* means human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes;

(b) *Discharge* includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping;

(c) *Marine sanitation device* includes any equipment for installation onboard a vessel and which is designed to receive, retain, treat, or discharge sewage and any process to treat such sewage;

(d) *Vessel* includes every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on waters of the United States;

(e) *New vessel* refers to any vessel on which construction was initiated on or after January 30, 1975;

(f) *Existing vessel* refers to any vessel on which construction was initiated before January 30, 1975;

(g) *Fecal coliform bacteria* are those organisms associated with the intestines of warm-blooded animals that are commonly used to indicate the presence of fecal material and the potential presence of organisms capable of causing human disease.

§ 140.2 Scope of standard.

The standard adopted herein applies only to vessels on which a marine sanitation device has been installed. The standard does not require the installation of a marine sanitation device on any vessel that is not so equipped. The standard applies to vessels owned and operated by the United States unless the Secretary of Defense finds that compliance would not be in the interest of national security.

§ 140.3 Standard.

(a) (1) In freshwater lakes, freshwater reservoirs or other freshwater impoundments whose inlets or outlets are such as to prevent the ingress or egress by vessel traffic subject to this regulation, or in rivers not capable of navigation by interstate vessel traffic subject to this regulation, marine sanitation devices certified by the U.S. Coast Guard (see 33 CFR part 159, published in 40 FR 4622, January 30, 1975), installed on all vessels shall be designed and operated to prevent the overboard discharge of sewage, treated or untreated, or of any waste derived from sewage. This shall not be construed to prohibit the carriage of Coast Guard-certified flow-through treatment devices which have been secured so as to prevent such discharges.

(2) In all other waters, Coast Guard-certified marine sanitation devices installed on all vessels shall be designed and operated to either retain, dispose of, or discharge sewage. If the device has a discharge, subject to paragraph (d) of this section, the effluent shall not have a fecal coliform bacterial count of greater than 1,000 per 100 milliliters nor visible floating solids. Waters where a Coast Guard-certified marine sanitation device permitting discharge is allowed include coastal waters and estuaries, the Great Lakes and inter-connected waterways, freshwater lakes and impoundments accessible through locks, and other flowing waters that are navigable interstate by vessels subject to this regulation.

(b) This standard shall become effective on January 30, 1977 for new vessels and on January 30, 1980 for existing vessels (or, in the case of vessels owned and operated by the Department of Defense, two years and five years, for new and existing vessels, respectively, after promulgation of implementing regulations by the Secretary of Defense under section 312(d) of the Act).

(c) Any vessel which is equipped as of the date of promulgation of this regulation with a Coast Guard-certified flow-through marine sanitation device meeting the requirements of paragraph (a)(2) of this section, shall not be required to comply with the provisions designed to prevent the overboard discharge of sewage, treated or untreated, in paragraph (a)(1) of this section, for the operable life of that device.

(d) After January 30, 1980, subject to paragraphs (e) and (f) of this section, marine sanitation devices on all vessels on waters that are not subject to a prohibition of the overboard discharge

of sewage, treated or untreated, as specified in paragraph (a)(1) of this section, shall be designed and operated to either retain, dispose of, or discharge sewage, and shall be certified by the U.S. Coast Guard. If the device has a discharge, the effluent shall not have a fecal coliform bacterial count of greater than 200 per 100 milliliters, nor suspended solids greater than 150 mg/1.

(e) Any existing vessel on waters not subject to a prohibition of the overboard discharge of sewage in paragraph (a)(1) of this section, and which is equipped with a certified device on or before January 30, 1978, shall not be required to comply with paragraph (d) of this section, for the operable life of that device.

(f) Any new vessel on waters not subject to the prohibition of the overboard discharge of sewage in paragraph (a)(1) of this section, and on which construction is initiated before January 31, 1980, which is equipped with a marine sanitation device before January 31, 1980, certified under paragraph (a)(2) of this section, shall not be required to comply with paragraph (d) of this section, for the operable life of that device.

(g) The degrees of treatment described in paragraphs (a) and (d) of this section are ''appropriate standards'' for purposes of Coast Guard and Department of Defense certification pursuant to section 312(g)(2) of the Act.

[41 FR 4453, Jan. 29, 1976, as amended at 60 FR 33932, June 29, 1995]

§ 140.4 Complete prohibition.

(a) Prohibition pursuant to CWA section 312(f)(3): a State may completely prohibit the discharge from all vessels of any sewage, whether treated or not, into some or all of the waters within such State by making a written application to the Administrator, Environmental Protection Agency, and by receiving the Administrator's affirmative determination pursuant to section 312(f)(3) of the Act. Upon receipt of an application under section 312(f)(3) of the Act, the Administrator will determine within 90 days whether adequate facilities for the safe and sanitary removal and treatment of sewage from all vessels using such waters are reasonably available. Applications made by States pursuant to section 312(f)(3) of the Act shall include:

(1) A certification that the protection and enhancement of the waters described in the petition require greater environmental protection than the applicable Federal standard;

(2) A map showing the location of commercial and recreational pump-out facilities;

(3) A description of the location of pump-out facilities within waters designated for no discharge;

(4) The general schedule of operating hours of the pump-out facilities;

(5) The draught requirements on vessels that may be excluded because of insufficient water depth adjacent to the facility;

(6) Information indicating that treatment of wastes from such pump-out facilities is in conformance with Federal law; and

(7) Information on vessel population and vessel usage of the subject waters.

(b) Prohibition pursuant to CWA section 312(f)(4)(A): a State may make a written application to the Administrator, Environmental Protection Agency, under section 312(f)(4)(A) of the Act, for the issuance of a regulation completely prohibiting discharge from a vessel of any sewage, whether treated or not, into particular waters of the United States or specified portions thereof, which waters are located within the boundaries of such State. Such application shall specify with particularly the waters, or portions thereof, for which a complete prohibition is desired. The application shall include identification of water recreational areas, drinking water intakes, aquatic sanctuaries, identifiable fish-spawning and nursery areas, and areas of intensive boating activities. If, on the basis of the State's application and any other information available to him, the Administrator is unable to make a finding that the waters listed in the application require a complete prohibition of any discharge in the waters or portions thereof covered by the application, he shall state the reasons why he cannot make such a finding, and shall deny the application. If the Administrator makes a finding that the waters listed in the application require a complete prohibition of

any discharge in all or any part of the waters or portions thereof covered by the State's application, he shall publish notice of such findings together with a notice of proposed rule making, and then shall proceed in accordance with 5 U.S.C. 553. If the Administrator's finding is that applicable water quality standards require a complete prohibition covering a more restricted or more expanded area than that applied for by the State, he shall state the reasons why his finding differs in scope from that requested in the State's application.

(1) For the following waters the discharge from a vessel of any sewage (whether treated or not) is completely prohibited pursuant to CWA section 312(f)(4)(A):

(i) Boundary Waters Canoe Area, formerly designated as the Superior, Little Indian Sioux, and Caribou Roadless Areas, in the Superior National Forest, Minnesota, as described in 16 U.S.C. 577–577d1.

(ii) Waters of the State of Florida within the boundaries of the Florida Keys National Marine Sanctuary as delineated on a map of the Sanctuary at *http://www.fknms.nos.noaa.gov/*.

(c)(1) *Prohibition pursuant to CWA* section 312(f)(4)(B): A State may make written application to the Administrator of the Environmental Protection Agency under section 312(f)(4)(B) of the Act for the issuance of a regulation establishing a drinking water intake no discharge zone which completely prohibits discharge from a vessel of any sewage, whether treated or untreated, into that zone in particular waters, or portions thereof, within such State. Such application shall:

(i) Identify and describe exactly and in detail the location of the drinking water supply intake(s) and the community served by the intake(s), including average and maximum expected amounts of inflow;

(ii) Specify and describe exactly and in detail, the waters, or portions thereof, for which a complete prohibition is desired, and where appropriate, average, maximum and low flows in million gallons per day (MGD) or the metric equivalent;

(iii) Include a map, either a USGS topographic quadrant map or a NOAA nautical chart, as applicable, clearly marking by latitude and longitude the waters or portions thereof to be designated a drinking water intake zone; and

(iv) Include a statement of basis justifying the size of the requested drinking water intake zone, for example, identifying areas of intensive boating activities.

(2) If the Administrator finds that a complete prohibition is appropriate under this paragraph, he or she shall publish notice of such finding together with a notice of proposed rulemaking, and then shall proceed in accordance with 5 U.S.C. 553. If the Administrator's finding is that a complete prohibition covering a more restricted or more expanded area than that applied for by the State is appropriate, he or she shall also include a statement of the reasons why the finding differs in scope from that requested in the State's application.

(3) If the Administrator finds that a complete prohibition is inappropriate under this paragraph, he or she shall deny the application and state the reasons for such denial.

(4) For the following waters the discharge from a vessel of any sewage, whether treated or not, is completely prohibited pursuant to CWA section 312(f)(4)(B):

(i) Two portions of the Hudson River in New York State, the first is bounded by an east-west line through the most northern confluence of the Mohawk River which will be designated by the Troy-Waterford Bridge (126th Street Bridge) on the south and Lock 2 on the north, and the second of which is bounded on the north by the southern end of Houghtaling Island and on the south by a line between the Village of Roseton on the western shore and Low Point on the eastern shore in the vicinity of Chelsea, as described in Items 2 and 3 of 6 NYCRR Part 858.4.

(ii) [Reserved]

[41 FR 4453, Jan. 29, 1976, as amended at 42 FR 43837, Aug. 31, 1977; 60 FR 63945, Dec. 13, 1995; 63 FR 1320, Jan. 8, 1998; 67 FR 35743, May 21, 2002]

§ 140.5 Analytical procedures.

In determining the composition and quality of effluent discharge from marine sanitation devices, the procedures contained in 40 CFR part 136, ''Guidelines Establishing Test Procedures for the Analysis of Pollutants,'' or subsequent revisions or amendments thereto, shall be employed.

PART 141—NATIONAL PRIMARY DRINKING WATER REGULATIONS

Subpart A—General

Subpart B—Maximum Contaminant Levels

Subpart C—Monitoring and Analytical Requirements

Subpart D—Reporting and Recordkeeping

Subpart E—Special Regulations, Including Monitoring Regulations and Prohibition on Lead Use

Subpart F—Maximum Contaminant Level Goals and Maximum Residual Disinfectant Level Goals

Subpart G—National Primary Drinking Water Regulations: Maximum Contaminant Levels and Maximum Residual Disinfectant Levels

Subpart H—Filtration and Disinfection

Subpart I—Control of Lead and Copper